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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,088	12/30/2003	Mikko Jaakkola	KOLS.083PA	6864

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EXAMINER	
THIER, MICHAEL	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/748,088	JAAKKOLA ET AL.	
	Examiner	Art Unit	
	MICHAEL T. THIER	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-13 and 15-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-13 and 15-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/18/2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-28 have been fully considered but have been found to be non persuasive.

Applicant argues that none of the cited references teaches or suggest checking the state of a user interface in response to a need to initiate handover or application of a handover algorithm on the basis of such triggered checking.

In response to applicant's argument, the examiner respectfully disagrees. The argued limitation is clearly obvious in view of the combination of references. Koichi teaches the idea of checking a portable telephone to see if it is in a charging stand (i.e. inactive) or not in a charging stand (i.e. active). If the device is in the charging stand, then handoff processing is forbidden since the device is in a fixed state. The examiner understands this idea to read on the mobile device being checking to determine whether or not to initiate a handover or run a handover algorithm. Kubosawa teaches the idea

that a user interface component (i.e. figure 1 item 62, input keys) is checked to determine if the handover should take place in figure 2 item S9, where it is shown that the processor of the mobile device checks for an instruction by the user in order to allow or not allow the handover to take place. He further shows that the interface component is checked automatically in response to detecting a need for handover in figures 2 steps S5, where the communication quality is shown to deteriorate, and then the process continues to judge the instruction by the user. This can clearly be read on the idea of checking the state of the user interface component automatically in response to detecting the need to initiate the handover algorithm since this judgment of the instruction by the user automatically takes place after the communication quality has deteriorated (i.e. need for handover). Therefore, the combination of Kubosawa and Koichi clearly teaches the idea that a user interface component is checked to determine whether or not to initiate a handover or run a handover algorithm. For further clarification the examiner even shows the Motorola reference, which teaches on page 3 lines 1-10, that the decision to handover is clearly based on detecting a need for handover where he explains that the criteria for the decision to handover is based on the quality of communications (i.e. where the quality of communications clearly reads on the "need for handover", since if the quality drops so low as to not allow communication, handover to another network would be required in order to continue communications). Therefore, the combination of references clearly teaches the claimed limitations (i.e. checking the state of a user interface component in response to a need to initiate a handover algorithm) and would have been obvious to one of ordinary skill in the art at

the time of invention.

Applicant further argues that the fixed state of Koichi does not correspond to the claimed inactive state.

In response to applicant's argument, the examiner respectfully disagrees. The idea that the phone is placed in a charging "stand" and thus in a fixed state can clearly be interpreted as the phone being in an inactive state, and thus the user interface in an inactive state. In any event, the examiner further provided Kubosawa which clearly teaches checking a user interface component to see if it is an active or inactive state in figure 2 item s9. Kubosawa teaches that the instruction of a user (from input keys 62, thus from a user interface component, i.e. keypad) is checked to determine whether to initiate handover. The idea os judging instruction of a user from a keypad clearly reads on checking is the user interface component is active or inactive since if the user has depressed keys, the user interface is clearly active, and if the user is not selecting or has not selected any keys, the keypad can be considered to be inactive. Thus the combination clearly teaches the claimed limitations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 8-13, 19, 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 11-331941) in view of Kubosawa (US 2002/0183062) in further view of UK Patent Application GB 2289191 (hereinafter Motorola).

Regarding claims 1, 9, and 21. Koichi teaches a mobile terminal, method, and computer readable medium comprising: (abstract and figure 2)

a processor (figure 2 item 31) configured to check a state of an interface component (i.e. check the state of the mobile device) (par. 39, i.e. the processor 31 checks whether the phone is attached or detached from the charging stand, and chooses to prohibit hand off or allow the hand off process), wherein the interface component is adjustable in an inactive state or in an active state (par. 39, i.e. attached or detached from the charging stand, where the attached state is interpreted as the user interface component being in an inactive state and detached is the active state of the user interface), and the apparatus is configured to set the inactive state as the state of the interface component when the user interface component is not being actively used, (par. 39-41, i.e. judges whether the phone is in a fixed state, i.e. in the charging stand, therefore the device sets the state as being in the stand or not being in the stand in order to judge whether the phone is in the stand, and when the device is in the stand it reads on the state being to the inactive state where the device is not actively used since it is in a "fixed" state. It can clearly be interpreted that when the mobile device is placed into the stand, that the user interface is in an inactive state. However, for further clarification of a user interface being judged as active and inactive please see the

Kubosawa reference which clearly teaches this idea in figure 2 step s9 as explained below.) and

if the current state of the user interface component is inactive (par. 41, i.e. judging whether the phone is in a fixed state in the charging stand), the processor is configured to prevent, on the basis of the checking, application of a handover algorithm (par. 41-42, i.e. judges if the phone is in the fixed state in the charging stand, and if it is found that the phone is in the charging stand then hand off processing is forbidden and the detection routine is stopped, thus reading on preventing application of a handover algorithm), configured to select one of at least two available channels to be used for a connection from the apparatus. (i.e. par. 40-41, hand off processing reads on the idea of selecting one of at least two available channels to be used for connection)

Although Koichi teaches checking if the mobile device is in a charging stand and deciding whether to allow or not allow hand off processing based on if the phone is in the charging stand or not (which the examiner is interpreting as the inactive and active states, and the inactive state is when the device is not actively being used), he does not specifically disclose that a user interface component is checked.

Kubosawa teaches a method and system for designating handover in a mobile communication system (title and abstract). He teaches the idea that a user interface component (i.e. figure 1 item 62, input keys) is checked to determine if the handover should take place in figure 2 item S9, where it is shown that the processor of the mobile device checks for an instruction by the user in order to allow or not allow the handover to take place. Further see par. 73 and 75 which explain that if there is no input the

operation returns to step S3, and therefore the handover is not performed. Therefore, the examiner understands from the Kubosawa reference that a user interface component (i.e. input keys), is checked in order to decide whether or not to handover.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the idea of checking a user interface component as in Kubosawa, with the system and method of preventing handover processing based on the status of the mobile phone being in the charge stand or not as in Koichi. The motivation for doing so would have been to allow for a user of the device to decide whether handover is necessary rather than automatically performing one (Kubosawa par. 11).

However, they do not distinctly disclose the limitations wherein the checking of the state occurs in automatically in response to detecting a need to initiate the handover algorithm.

Motorola teaches a method, system, and computer readable medium for determining handover (abstract). He teaches on page 3 lines 1-10, the decision to handover is based on detecting a need for handover where he explains that the criteria for the decision to handover is based on the quality of communications. The quality of communications clearly reads on the "need for handover", since if the quality drops so low as to not allow communication, handover to another network would be required in order to continue communications.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Motorola, into the teachings of Koichi and

Kubosawa. The motivation for doing so would have been to allow for determining whether or not to perform handover based on intersystem cell association, and to allow for uninterrupted service provision between different communication systems. (Motorola page 1 lines 23-28 and page 2 lines 5-10)

Regarding claims 2 and 10. Kubosawa further teaches wherein the checking of the state occurs in response to changing the state of the user interface component. (see par. 33, and par. 35 i.e. handover is done by instructing the controller 50 by using input keys 62, also see figure 2 item S9, i.e. judge instruction of user)

Regarding claims 3 and 13. Motorola further teaches on page 3 lines 1-10, the idea of deciding to perform a handover if the mobile station is near another coverage area (i.e. network resource).

Regarding claims 8 and 19. Kubosawa further teaches wherein the handover algorithm determines a change between channels of different network technologies. (par. 37, the handover is performed between different communication systems, and a change in channel would thus be inherent.)

Regarding claims 11 and 12. Kubosawa further teaches wherein the terminal is configured to initiate the handover algorithm in response to the change from the inactive state to the active state. (see par. 33, and par. 35 i.e. handover is done by instructing the controller 50 by using input keys 62, also see figure 2 item S9, i.e. judge instruction of user, therefore when a key is pushed the key is changed from inactive to active, and the handover takes place, thus reading on this limitation.)

Regarding claims 22, 24, and 26. Kubosawa further teaches that checking the state further comprises checking the state of a mechanical user interface component in figure 1 item 62, which are input keys, (i.e. mechanical components).

Regarding claims 23, 25, and 27. Kubosawa further teaches the idea of performing measurements on the current state if the user interface is active. (see figure 2 item S4)

Regarding claim 28. Kubosawa further teaches wherein the apparatus is a mobile terminal with a user interface in figure 1.

5. Claims 5, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 11-331941) in view of Kubosawa (US 2002/0183062) in further view of UK Patent Application GB 2289191 (hereinafter Motorola) and Claxton (US 6178388).

Regarding claims 5, 15, and 16. Koichi, Kubosawa, and Motorola teach the limitations of the previous claims.

However, they do not distinctly disclose wherein the terminal comprises a body portion and a lid which is connected to the body portion and can be moved with respect to the body portion, and wherein the state of the lid in relation to the body portion is checked.

Claxton teaches the idea that flip phones (phones with 1st and 2nd portions) are well known in the art and that when the flip phone is closed (with key pads covered) they are inactive, and when opened they are active. (column 1 lines 48-59) (i.e. which

clearly reads on "wherein the state of the lid in relation to the body portion is checked", and checking the position of the 1st portion in relation to the 2nd).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Claxton into the teachings of Koichi, Kubosawa, and Motorola. The motivation for doing so would have been to allow for the mobile device as in Kubosawa to be of the flip phone type, since it is a well-known and highly popular style mobile phone.

6. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 11-331941) in view of Kubosawa (US 2002/0183062) in further view of UK Patent Application GB 2289191 (hereinafter Motorola) and Cowsky, III et al. (US 2004/0204123).

Regarding claims 6 and 17. Koichi, Kubosawa, and Motorola teach the limitations of the previous claims.

However, they do not distinctly disclose wherein the terminal comprises a keypad and a keypad locking functionality for locking the keypad, whereby the state of the keypad locking is checked.

Cowsky teaches a flip phone with keypad in figure 1, he further teaches the idea of a locking functionality for locking the keypad in par. 2 to allow for making the keys inactive.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the locking function as in Cowsky with the teachings of Koichi,

Kubosawa, and Motorola. The motivation for doing so would have been to allow for locking the keypads and avoiding inadvertent keystrokes (Cowsky par. 1-2)

7. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 11-331941) in view of Kubosawa (US 2002/0183062) in further view of UK Patent Application GB 2289191 (hereinafter Motorola) and Wren, III (US 2004/0248594).

Regarding claims 7 and 18. Koichi, Kubosawa, and Motorola teach the limitations of the previous claims.

However, they do not distinctly disclose wherein the terminal comprises a screen saver functionality, the state of which is detected, whereby the state of the user interface component is inactive when the screen saver functionality is applied and the state of the user interface component is active when the screen saver functionality is not applied.

Wren teaches the idea of having screen savers displayed on mobile phones in par. 55. He further teaches to display the screen saver when the device state is inactive, and not displaying it when the device is active (i.e. detecting the state of the device).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Wren with the teachings of Koichi, Kubosawa, and Motorola. The motivation for doing so would have been to allow for the ever popular idea of personalizing the user device (Wren par. 55)

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koichi (JP 11-331941) in view of Kubosawa (US 2002/0183062) in further view of UK Patent Application GB 2289191 (hereinafter Motorola) and Harris et al. (US 6871074).

Regarding claim 20. Koichi, Kubosawa, and Motorola teach the limitations of the previous claims. He further teaches the idea of the terminal comprising of a timer in figure 2, see item S3.

However they do not distinctly disclose wherein the terminal comprises a timer configured to determine the state of the user interface as inactive after a predetermined time period has elapsed after the latest user activity.

Harris teaches it is well known for a mobile terminal using a timer to transition the mobile to an off/inactive state upon the given time being elapsed (clearly shown in the abstract).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Harris with the teachings of Koichi, Kubosawa, and Motorola. The motivation for doing so would have been to increase system performance (abstract).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. THIER whose telephone number is (571)272-2832. The examiner can normally be reached on Monday thru Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL T THIER/
Examiner, Art Unit 2617
10/16/2009